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<b>Notice of Allowability</b>	<b>Application No.</b>	<b>Applicant(s)</b>	
	10/802,195	HALTER, MICHAEL A.	
	<b>Examiner</b>	<b>Art Unit</b>	
	Jinhee J Lee	2831	

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--**  
 All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☐ This communication is responsive to \_\_\_\_\_.
2. ☒ The allowed claim(s) is/are 1,3,4,6-15,18 and 19.
3. ☐ The drawings filed on \_\_\_\_\_ are accepted by the Examiner.
4. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
  - a) ☐ All    b) ☐ Some\*    c) ☐ None    of the:
    1. ☐ Certified copies of the priority documents have been received.
    2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
    3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

\* Certified copies not received: \_\_\_\_\_.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.  
**THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.**

5. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
  6. ☒ CORRECTED DRAWINGS ( as "replacement sheets") must be submitted.
    - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review ( PTO-948) attached
      - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date \_\_\_\_\_.
    - (b) ☒ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date 0105.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).**
7. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

**Attachment(s)**

- |  |   |
|--|---|
| 1. <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 5. <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)                       |
| 2. <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | 6. <input checked="" type="checkbox"/> Interview Summary (PTO-413),<br>Paper No./Mail Date _____. |
| 3. <input checked="" type="checkbox"/> Information Disclosure Statements (PTO-1449 or PTO/SB/08),<br>Paper No./Mail Date <u>0304</u> | 7. <input checked="" type="checkbox"/> Examiner's Amendment/Comment                               |
| 4. <input type="checkbox"/> Examiner's Comment Regarding Requirement for Deposit<br>of Biological Material                           | 8. <input checked="" type="checkbox"/> Examiner's Statement of Reasons for Allowance              |
|  | 9. <input checked="" type="checkbox"/> Other <u>See Continuation Sheet</u> .                      |

### EXAMINER'S AMENDMENT

1. An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with Charles Daugherty on 1/31/05.

The application has been amended as follows:

#### **In the Claims:**

1. Cancel claims 2, 5, 16, 17 and 20.
2. Amend claim 1 as below:

Claim 1 (amended). A flat cable, comprising:

- (a) a first power conducting layer, wherein said first power conducting layer comprises a first power conductor, and the width of said first power conductor is more than half of the width of the cable; and
- (b) a second power conducting layer beneath said first power conducting layer, wherein said second power conducting layer comprises a second power conductor, and the width of said second power conductor is more than half of the width of the cable, and wherein said second power conductor further comprises a conducting tab folded around said first power conducting layer forming an electrical connecting pad over said first power conducting layer on a side of said

first power conducting layer opposite said second power conducting layer--;

(c) a first signal conductor layer above said first power conducting layer;

and

(d) a top film layer above said first signal conductor layer, wherein said top film layer comprises openings for electrical connection to said signal conductor and said first and second power conducting layers.

3. In claim 3, line 1, change "of claim 2" to --of claim 1--.
4. In claim 6, line 1, change "of claim 5" to --of claim 1--.
5. In claim 7, line 1, change "of claim 2" to --of claim 1--.
6. In claim 8, line 1, change "of claim 2" to --of claim 1--.
7. Amend claim 15 as below:

Claim 15 (amended). A flat cable, comprising:

(a) a signal layer;

(b) a power layer comprising one of a power conductor and a ground conductor, said power layer being at least substantially as wide as the cable along its length;

(c) a bus layer comprising a bus conductor at least substantially as wide as the cable along its length; and

(d) a dielectric layer between said signal layer and said power and bus layers--;

wherein one of said ground and power conductors further comprises a  
conducting tab extending outwardly from said one of said ground and  
power conductors;

wherein said tab bends over the side of the other of said ground and  
power conductors opposite said one of said ground and power  
conductors; and

wherein a top film comprises openings providing electrical  
communicative access to said signal layer, said tab, and said one of  
said power and bus conductors that does not comprise said tab.

8. In claim 18, line 1, change "of claim 17" to --of claim 15--.

**In the Drawings:**

9. In figure 2, cross-hatch items 12, 14 and 32 as insulative layer as shown in the attached drawing; change the leading lines for items 44 and 46 as shown in the attached drawing.

***Allowable Subject Matter***

2. Claims 1, 3, 4, 6-15 and 18-19 are allowed.
3. The following is an examiner's statement of reasons for allowance: ✓

Re claims 1, 3, 4 and 6-14, prior arts do not teach or suggest the combination of a flat cable with a second power conducting layer with a conducting tab folded around the first power conducting layer with a first signal conductor layer above the first power conducting layer having a top film layer above the first signal conducting layer having

openings for electrical connection to the signal conductor and first and second power conducting layers.

Re claims 15 and 18-19, prior arts do not teach or suggest the combination of a flat cable with a signal layer, and one of a ground and a power conductor with a conducting tab bending over the side with a top film having openings providing electrical access to the signal layer, the tab, and the other one of the power and bus conductors.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

#### ***Conclusion***

4. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.


Farquhar et al. and Takano are cited to show various forms of a flat cable.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jinhee J Lee whose telephone number is 571-272-1977. The examiner can normally be reached on M, T, Th and F at 6:30AM-5PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Dean A Reichard can be reached on 571-272-2800 ext. 31. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

jil

 2/7/05  
DEAN A. REICHARD  
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